

REMARKS

This Amendment addresses the issues outstanding from the final Office Action dated June 8, 2007.

Applicants respectfully request favorable reconsideration of this application, as amended.

Claims 1, 6, and 8 were rejected under 35 U.S.C. 102(b) as being anticipated by Fouquet et al. (US 5,593,183). Claims 1, 7, and 8 were rejected under 35 U.S.C. 102(b) as being anticipated by JP 2001-106092 (JP'092).

Without acceding to the outstanding rejections, independent Claim 1 has been amended to recite, inter alia, an impact absorption type steering column apparatus having column sided upper and lower brackets press-fitted to vehicle body sided upper and lower brackets that are secured to a vehicle body. The apparatus supports a steering column via a fastening bolt inserted through through-holes formed in the column sided and vehicle body sided upper brackets and via a pivoting bolt inserted through through-holes formed in the column sided and vehicle body sided lower brackets as a center of rotation for tilt movement of the steering column. Upon a secondary collision, the steering column apparatus absorbs impact energy such that the vehicle body sided upper bracket deforms as the steering column moves toward the front of the vehicle. Also, upon secondary collision, the column sided lower bracket separates from the

vehicle body sided lower bracket. The vehicle body sided upper bracket is composed integrally of a vehicle body securing portion to be secured to a strength member of the vehicle body, a vertical wall portion extending downwards from the vehicle body securing portion through a bending portion to form a substantially L-shaped bracket, and column fastening fixing portions projecting from the vertical wall portion and extending along the column toward the front of the vehicle and having the through-hole as an elongate hole for inserting the fastening bolt for tilt adjustment. The through-hole in the column sided upper bracket is formed as an elongate hole extending substantially in parallel with an axis of the steering column to the rear of the vehicle from a position of the fastening bolt.

The applied references neither disclose nor suggest Applicants' claimed invention. Note, for example, that Fouquet fails to disclose or suggest a steering column apparatus having column sided upper and lower brackets press-fitted to vehicle body sided upper and lower brackets that are secured to a vehicle body. Note further that neither Fouquet nor JP'092 disclose or suggest a steering column apparatus with a vehicle body sided upper bracket composed integrally of a vehicle body securing portion to be secured to a strength member of the vehicle body, a vertical wall portion extending downwards from the vehicle body

securing portion through a bending portion to form a substantially L-shaped bracket, and column fastening fixing portions projecting from the vertical wall portion and extending along the column toward the front of the vehicle and having a through-hole as an elongate hole for inserting a fastening bolt for tilt adjustment.

According to the invention of the present application, the column fastening fixing portion 14 of the vehicle body sided upper bracket 4 extends toward the front of the vehicle from the vertical wall portion 12. When a secondary collision occurs, the fastening bolt 16 moves downward along the elongate hole 13 of the column fastening fixing portion while pushing the elongate hole upward, so that the column fastening fixing portion and the vertical wall portion turn about bending portion 11, as shown in attached FIG. 1A, and elongate hole 13 rotates upward toward alignment with a collapsing direction of the steering column. Accordingly, collapsing for energy absorption may transition smoothly from that of bolt slide along elongate hole 13 to that of bending of vehicle body sided bracket 4, because through-hole E of column sided upper bracket 15 is extended substantially in parallel with an axis of the steering column to the rear side of the automotive vehicle from a position of the bolt, as recited in Claim 1.

In contrast, energy absorption in the Fouquet steering column occurs upon a secondary collision first when body-tube 10 slides in support 11, secondly when shock absorber 1 absorbs an amount of energy, and thirdly when shock absorber 1 travels the full energy-absorbing distance of travel (See Fouquet Col. 9, Line 13 to Col. 10, Line 15).

The energy absorption mechanism in JP'092 also differs from that of Applicants' invention. Note, for example, that JP'092 does not disclose a vehicle body side upper bracket with column fastening fixing portions projecting from a vertical wall portions where the column fastening fixing portions and vertical wall portion turn about a bending portion upon secondary collision.

It will thus be appreciated that Claim 1, at least as presently amended, distinguishes patentably from the applied references.

Accordingly, Claim 1 should now be allowed. Minor modifications were made to Claims 6 and 7 in view of the amendments to Claim 1. Claims 6-8 should also be allowed, at least in view of their dependency from Claim 1.

Independent Claim 9 has been added to provide more comprehensive protection for certain aspects of Applicants' invention. Note that Claim 9 recites, inter alia, an impact absorption type steering column apparatus for a vehicle in which a column sided upper bracket is press-fitted to a

vehicle body sided upper bracket secured to a vehicle body. The steering column is supported via a bolt inserted through through-holes formed in the column sided and vehicle body sided upper brackets. When a secondary collision happens, an impact energy thereof is absorbed in a way that causes deformation of the vehicle body sided upper bracket while the steering column moves towards the front of the vehicle. The vehicle body sided upper bracket is composed integrally of a vehicle body securing portion, a vertical wall portion extending downwards from the vehicle body securing portion through a bending portion to form a substantially L-shaped bracket, and column fixing portions extending from the vertical wall portion substantially in parallel with an axis of the steering column toward the front of the vehicle. Upon secondary collision, the vertical wall portion and column fixing portions rotate about the bending portion, thereby bringing the vehicle body sided upper bracket elongate hole toward alignment with a collapsing direction of the steering column.

It is apparent from the above discussion regarding the structural features of the vehicle body sided upper bracket that the applied references neither disclose nor suggest such an arrangement. Note further that the applied references neither disclose nor suggest a vehicle body side upper bracket with column fixing portions extending from a

vertical wall portion, where the column fixing portions and vertical wall portion turn about a bending portion upon a secondary collision. Claim 9 is therefore believed also to be allowable.

Newly added Claims 10-12 depend from independent Claim 9 and should be allowed at least for the reasons discussed above with respect to Claim 9.

Applicants respectfully request an early Notice of Allowance.

The Commissioner is hereby authorized to charge to Deposit Account No. 50-1165 (XA-10139) any fees under 37 C.F.R. §§ 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby requested.

Attachment:

Respectfully submitted,

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